



Retina MacBook 2015 Lower Case Assembly Replacement

Replace the lower case assembly with battery on the Retina MacBook 2015.

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INTRODUCTION

Use this guide to replace your Retina MacBook 2015's lower case assembly, which includes the battery.



TOOLS:

- iPad Battery Isolation Pick (1)
- P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1)
- Spudger (1)
- T4 Torx Screwdriver (1)
- T5 Torx Screwdriver (1)
- Tweezers (1)
- Tri-point Y00 Screwdriver (1)
- iOpener (1)
- iFixit Opening Tools (1)



PARTS:

- MacBook 12" Retina (Early 2015) Lower Case Assembly (1)
- MacBook 12" Retina (Early 2015) Trackpad Ribbon Cable (1)
- MacBook 12" Retina (Early 2015) Battery (1)
- MacBook 12" Retina (Early 2016 Early 2016) Lower Case Screw Set (1)

Step 1 — Retina MacBook 2015 Lower Case Assembly Removal



⚠ Before proceeding, power down your MacBook. Close the display and lay it on a soft surface, top-side down.

- Remove the following eight screws securing the lower case:
 - Two 1.8 mm P5 Pentalobe screws
 - Four 2.9 mm P5 Pentalobe screws
 - Two 6.1 mm P5 Pentalobe screws

Step 2



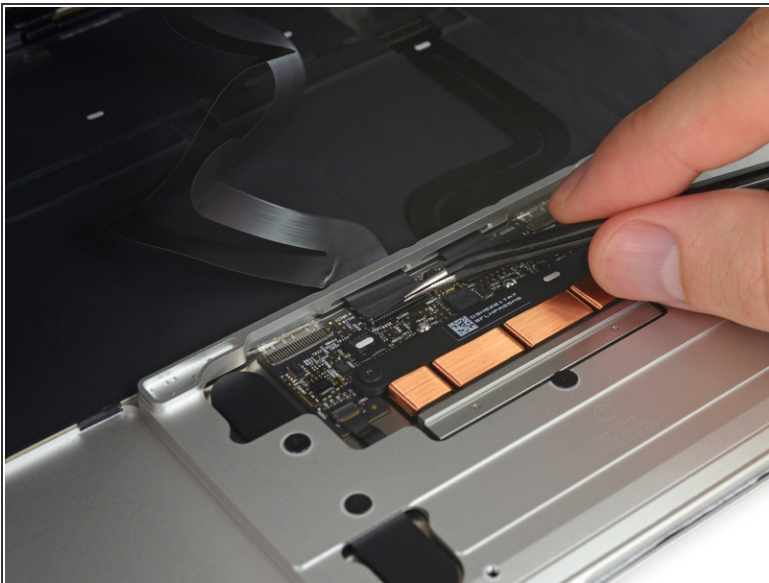
- Wedge your fingers between the upper case and the lower case, starting from the rear of the MacBook between the hinges.
- ⚠ Lift the lower case only slightly to avoid damaging the cables that connect the lower case to the upper case.
- Keeping a firm grip, lift steadily until the lower case separates slightly from the upper case.
- ⓘ You may experience a lot of resistance when lifting the lower case. If necessary, slide a plastic opening tool down the side edges of the lower case to pop the two hidden retaining clips free.

Step 3



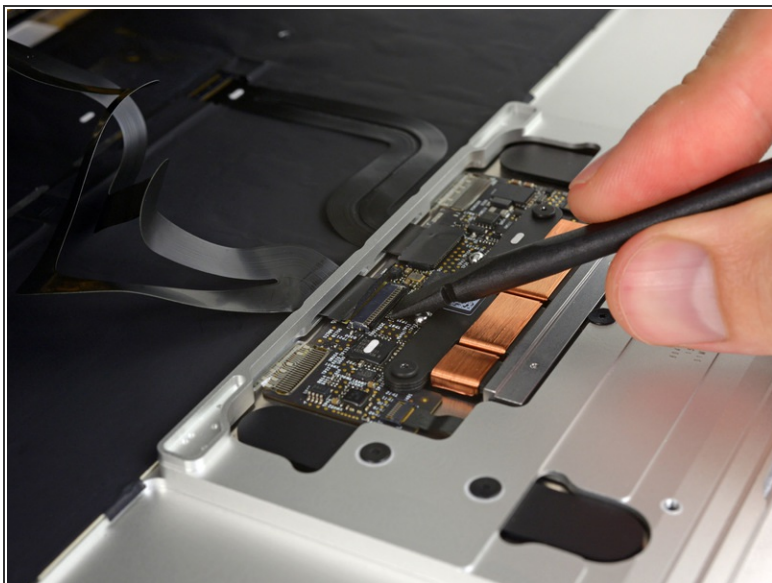
- Rotate the MacBook 180° and gently flip open the lower case from the front.
 - Open the lower case to an angle of about 45°.
- ⚠ Take care not to damage the ribbon cables that still attach the lower case to the MacBook.

Step 4



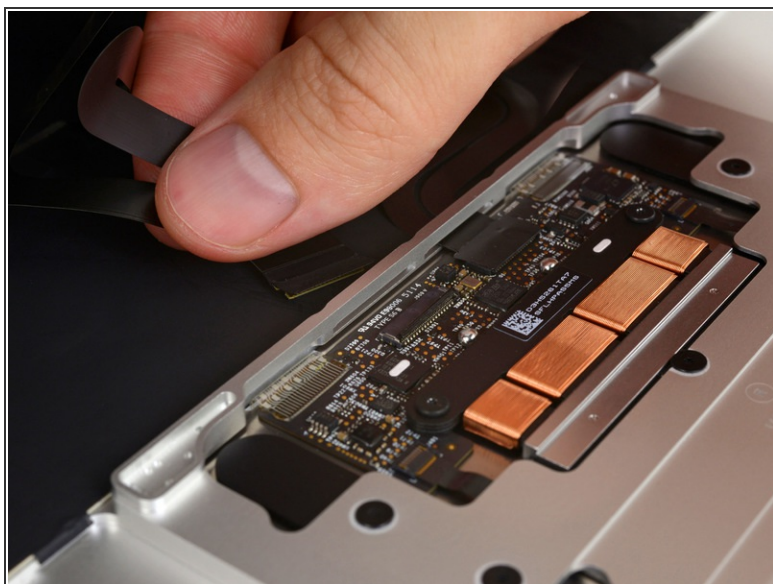
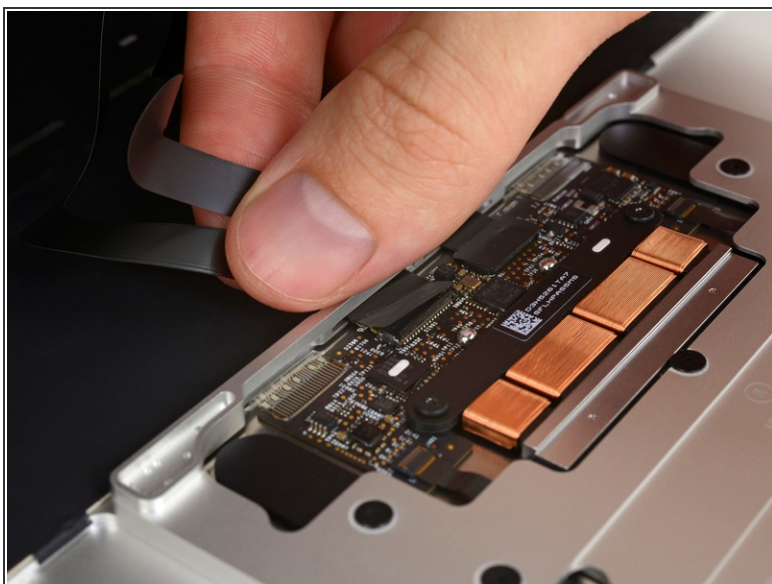
- Use tweezers to peel back the tape covering the trackpad cable ZIF connector.

Step 5



- Use a spudger to carefully flip up the retaining flap on the trackpad cable ZIF connector.

Step 6



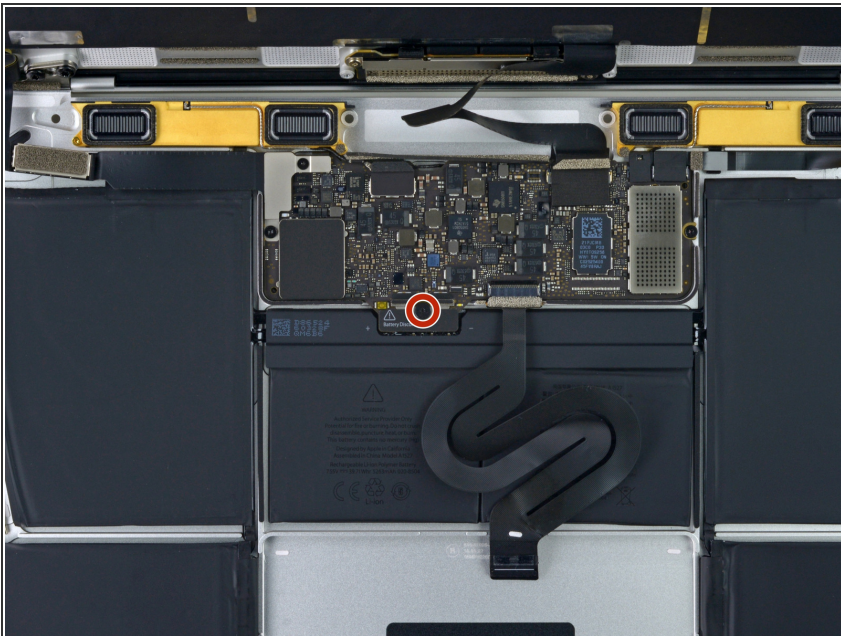
- Disconnect the trackpad ribbon cable from the trackpad by pulling it gently through its slot in the frame.

Step 7



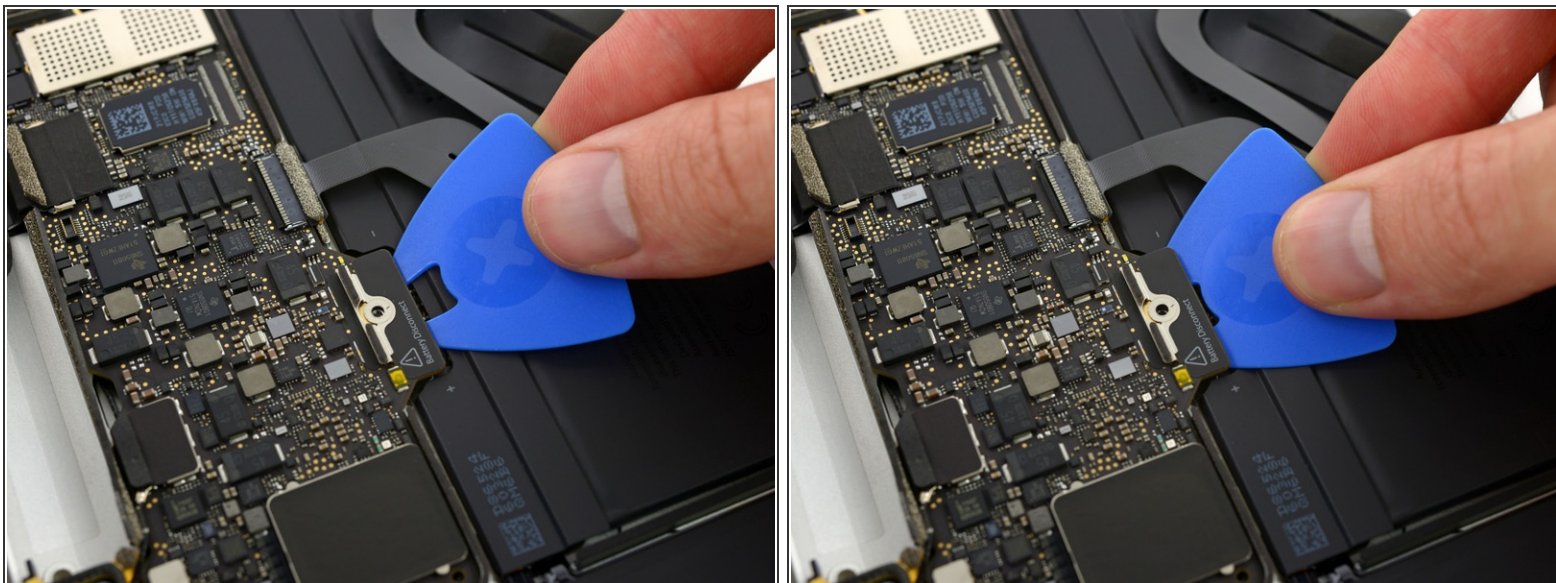
- Carefully turn the MacBook over, so that the lower case lays flat.
- Raise the upper case/display assembly to about a 90-100° angle, or use something to prop it up so you don't have to hold it.
- ❗ It's possible to open the MacBook all the way and lay both sides down flat, but this may put undue strain on the remaining connecting cables.

Step 8



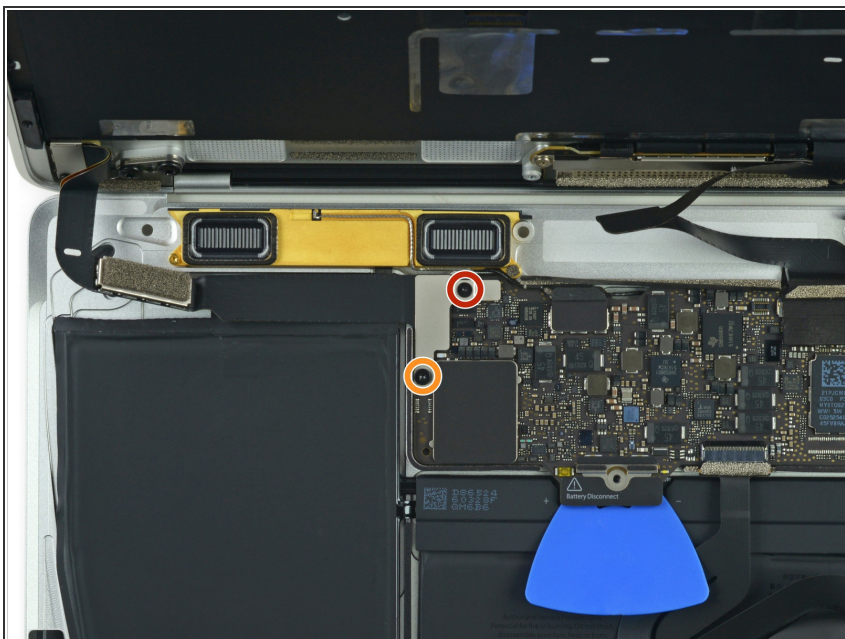
- Remove the single 2.9 mm T5 Torx screw securing the battery connector to the logic board.

Step 9



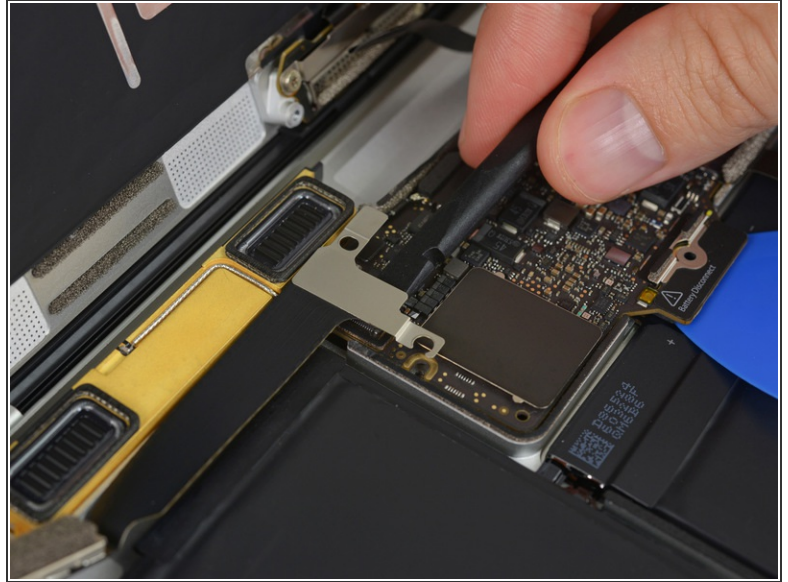
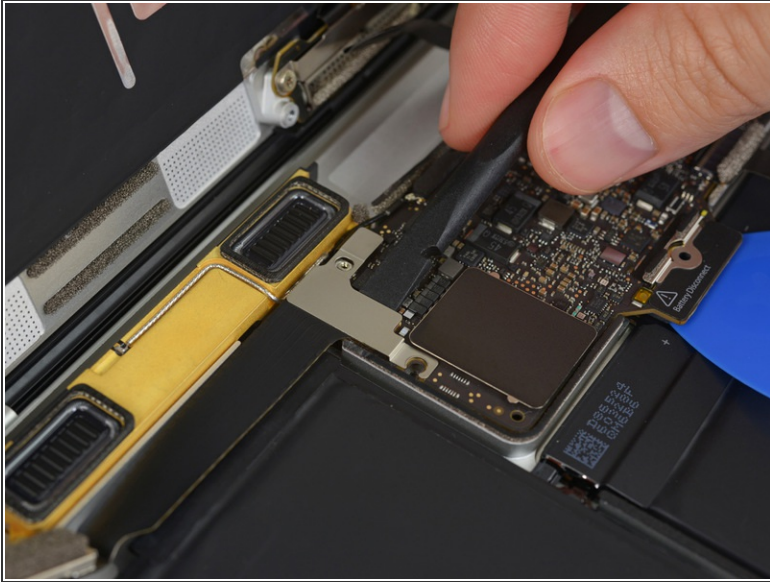
- Disconnect the battery by inserting a [battery isolation pick](#) between the logic board and the battery connector.

Step 10



- Remove the two screws securing the USB-C port cable bracket:
 - 1.1 mm Tri-point Y00 screw
 - 3.5 mm T5 Torx screw

Step 11



- Use the flat end of a spudger to disconnect the USB-C port cable bracket by prying it straight up from the logic board.

Step 12



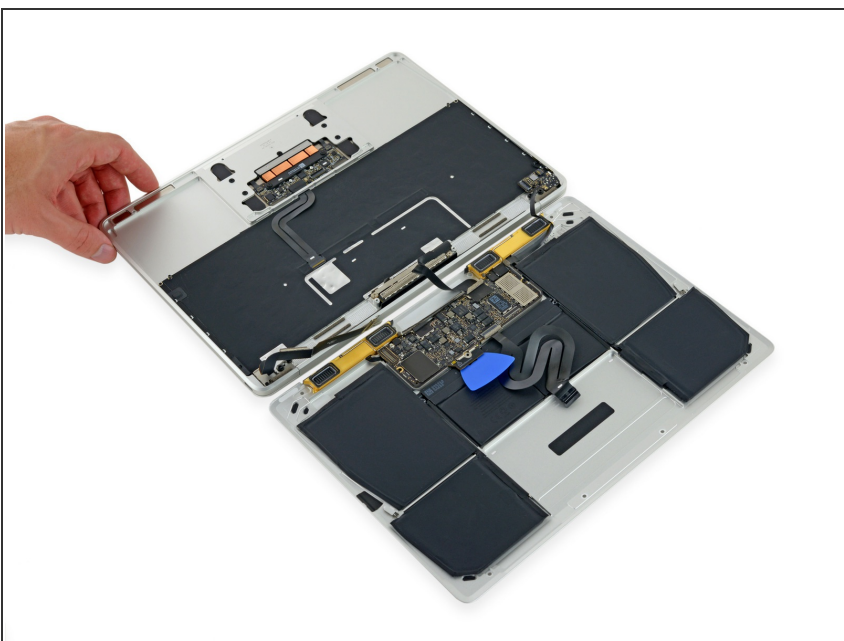
- Use a spudger to flip open the retaining flap on the audio jack board cable ZIF connector.

Step 13



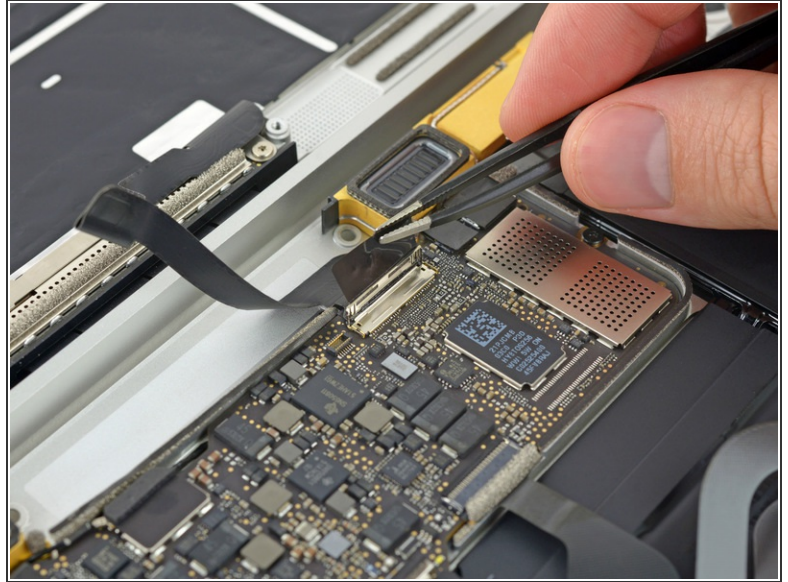
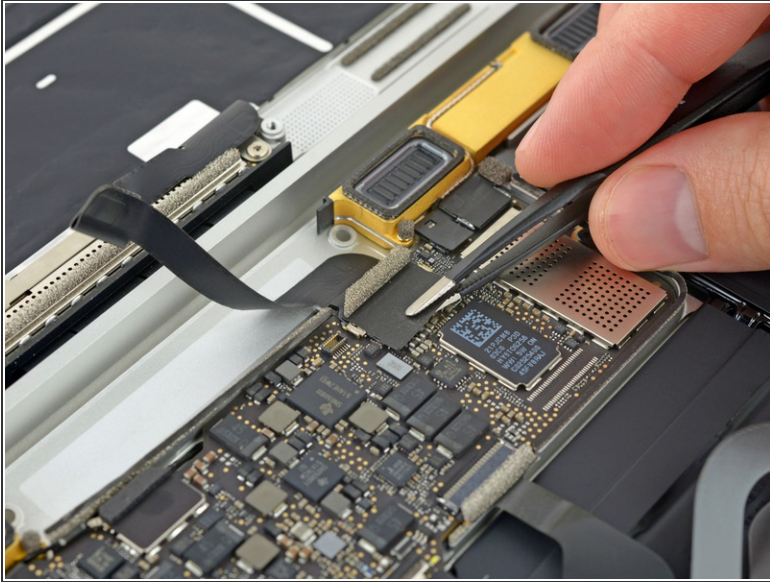
- Disconnect the audio jack board ribbon cable by pulling it straight back out of the ZIF connector.
- ✦ During reassembly, orient the ribbon cable so that the side with the white stripe faces you, as shown.

Step 14



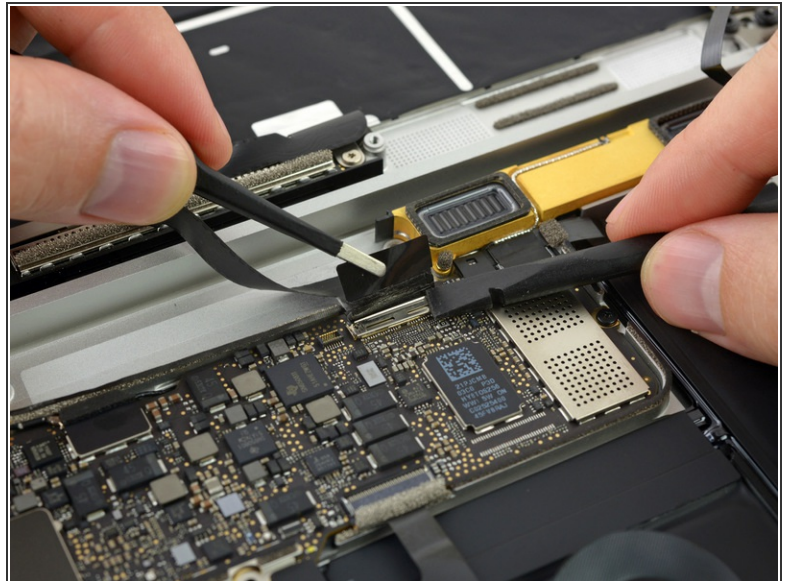
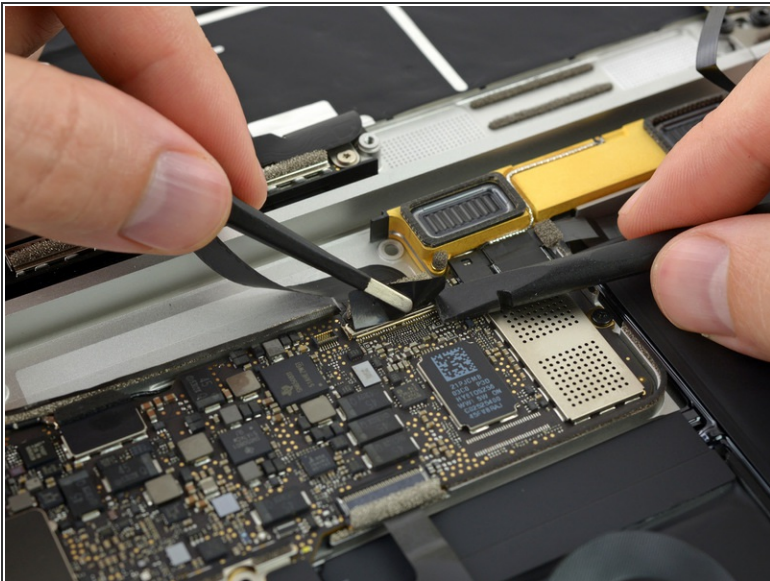
- Open the MacBook the rest of the way and lay the two halves down flat, being careful of the ribbon cable that still connects them.

Step 15



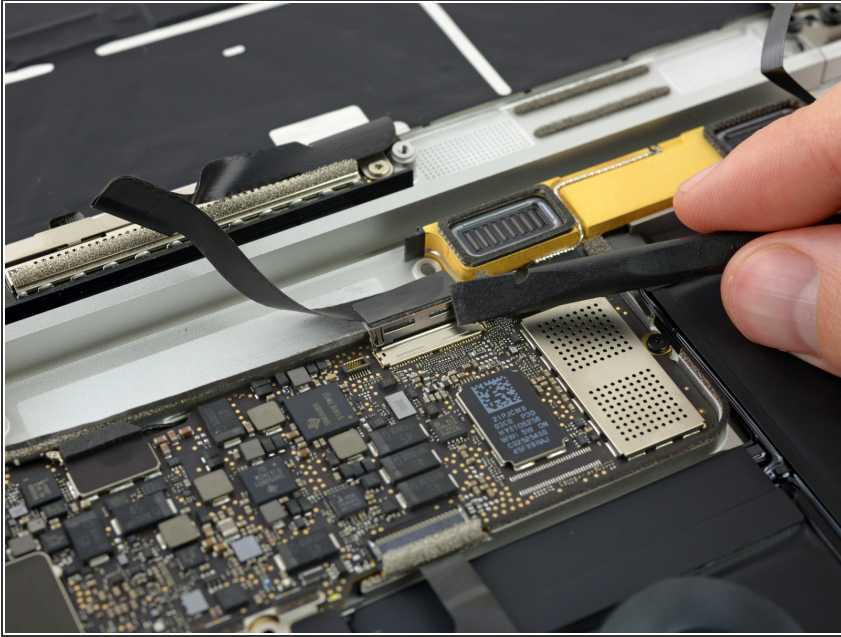
- Use tweezers to peel back the tape covering the display cable connector.

Step 16



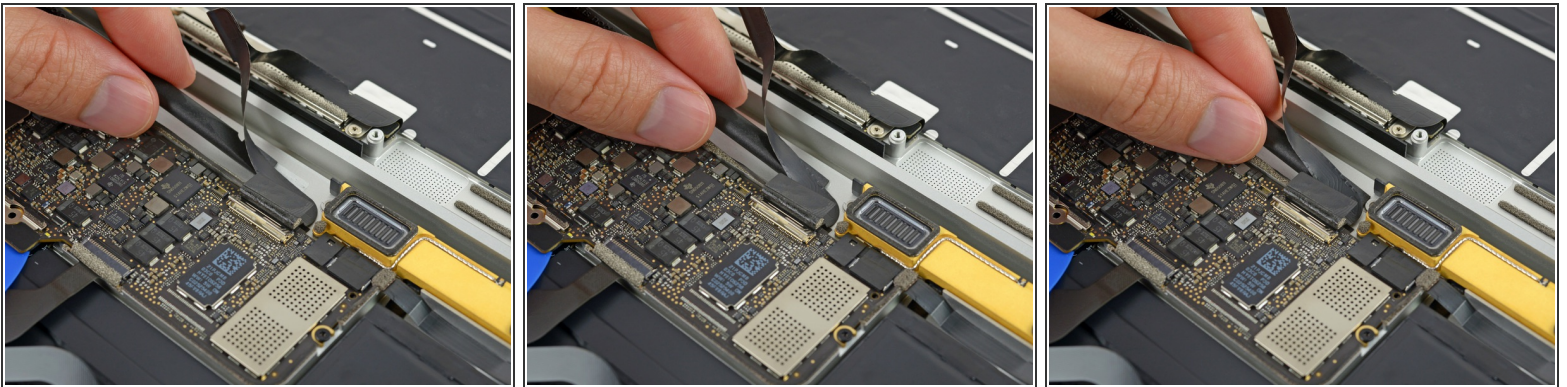
- ⓘ It's possible the metal retaining flap on the display cable connector may flip open, remaining stuck to the tape.
- If so, use the flat end of a spudger to hold down the retaining flap while peeling the tape away with the tweezers.

Step 17



- Use the flat end of a spudger to flip open the retaining flap on the display cable connector.
- Try to keep it clear of the tape, or it may re-adhere and make cable removal difficult.

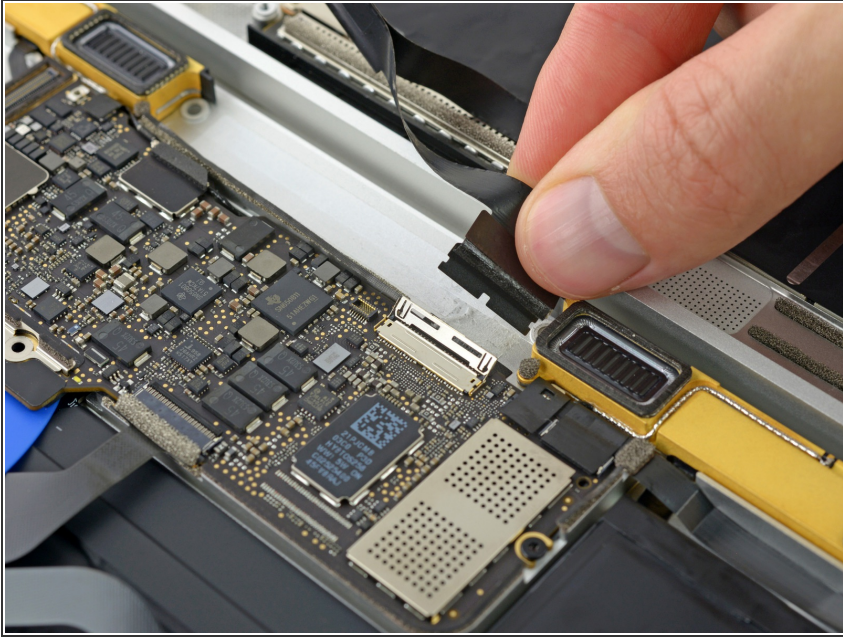
Step 18



- Carefully slide the flat end of a spudger underneath the display cable to separate the adhesive holding it to the lower case.

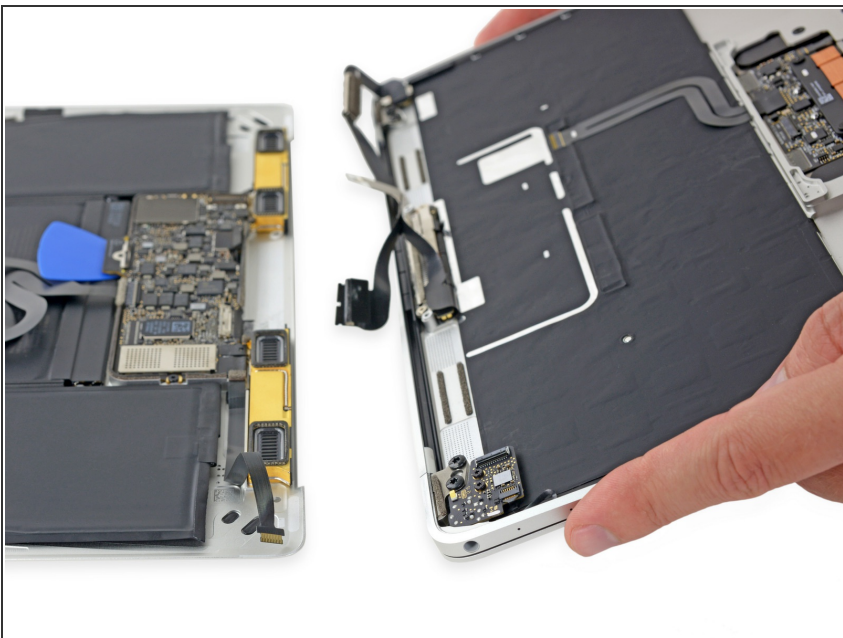
⚠ Take care not to damage the cable. If the adhesive is very strong, heat the case directly beneath the cable with an [iOpener](#) to soften the adhesive, and then try again.

Step 19



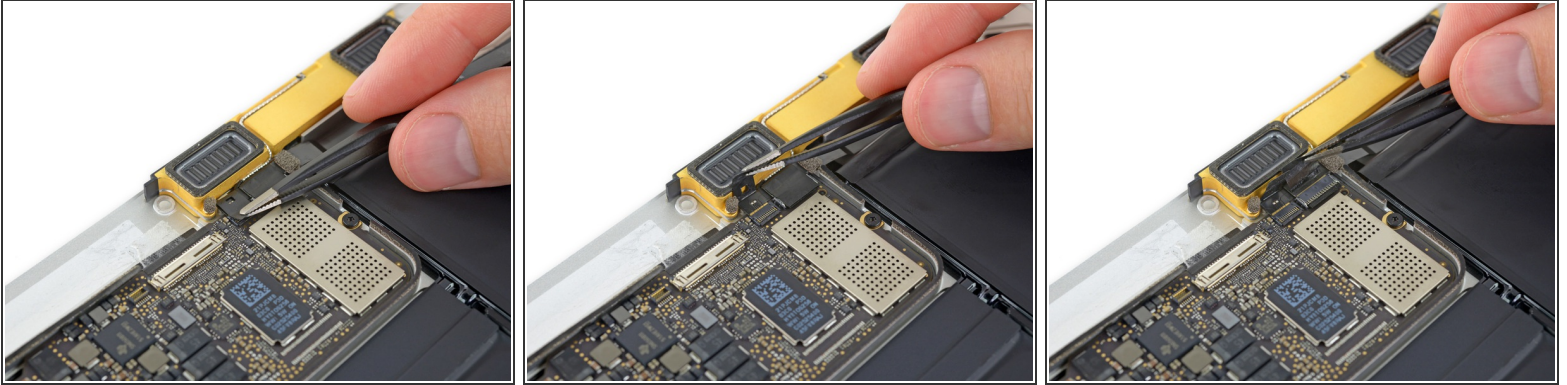
- Disconnect the display cable by gently pulling it straight out of its connector.

Step 20



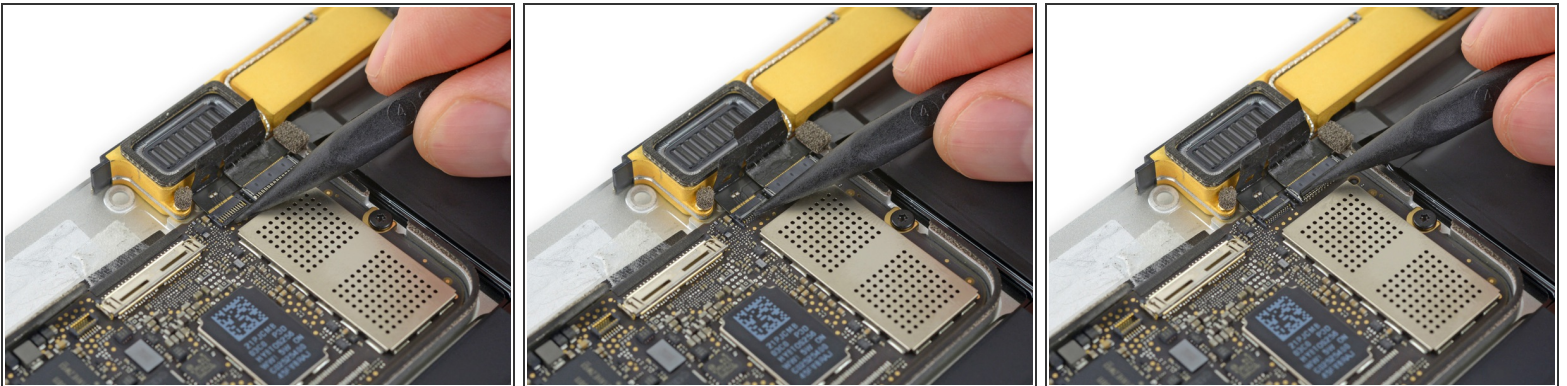
- Separate the upper case assembly from the lower case assembly.

Step 21 — Logic Board



- Use tweezers to peel up the tape covering the two ZIF connectors—one for the right speaker cable, and one for the audio jack board cable.

Step 22



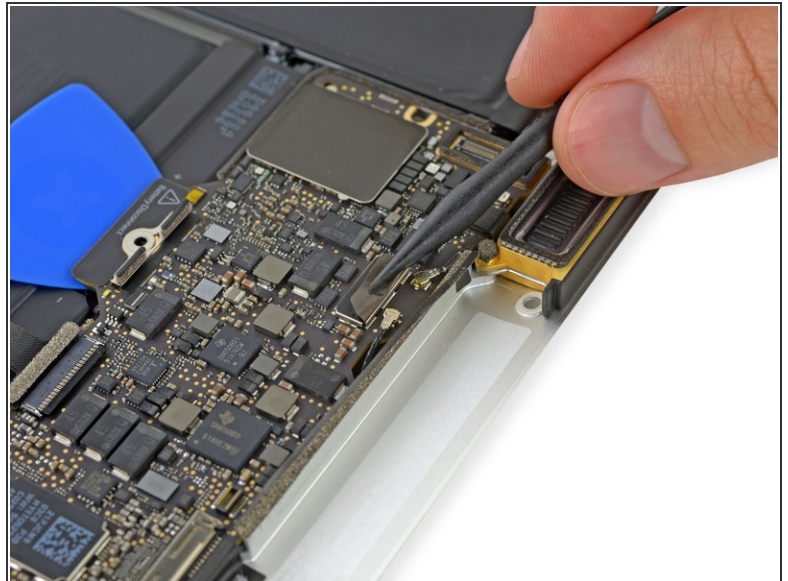
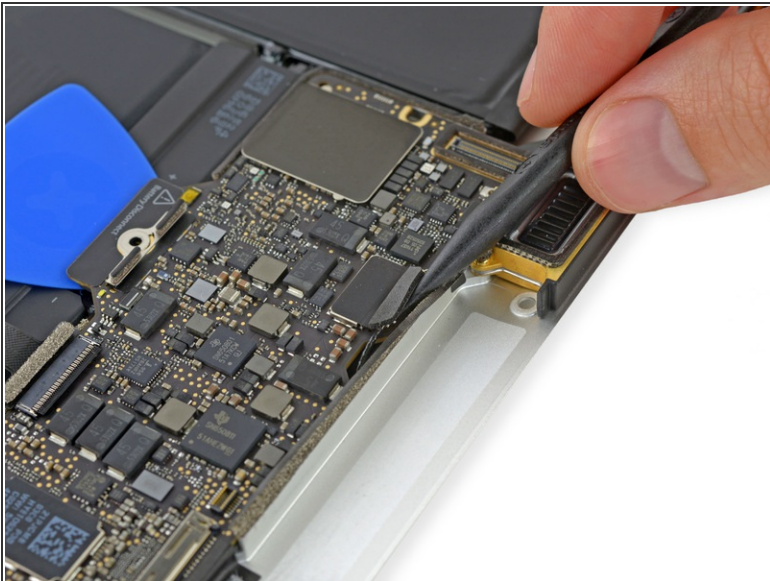
- Use the point of a spudger to flip up both ZIF connector retaining flaps.

Step 23



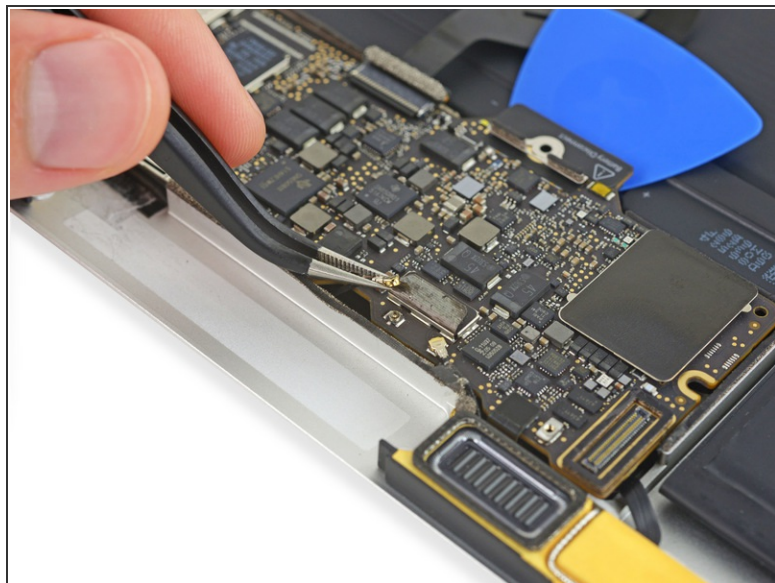
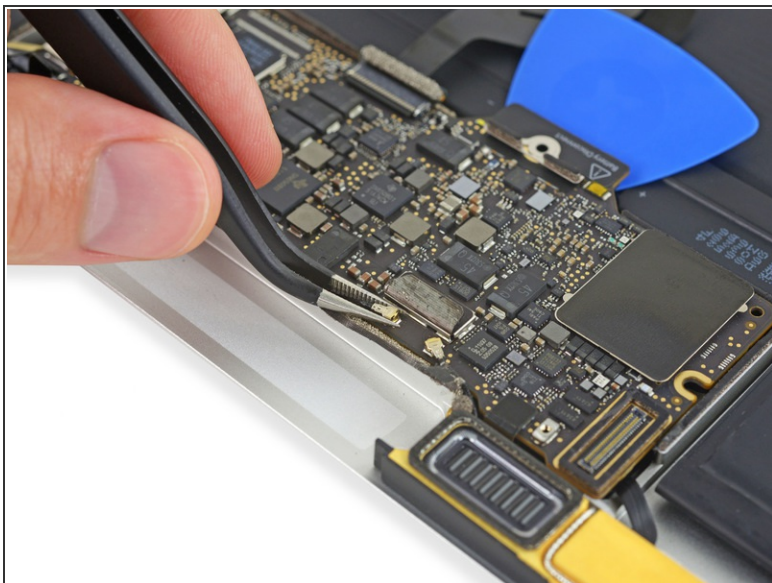
- Use tweezers to carefully pull the two ribbon cables free of their connectors.

Step 24



- Use the point of a spudger to peel up the foam pad covering the two antenna connectors.

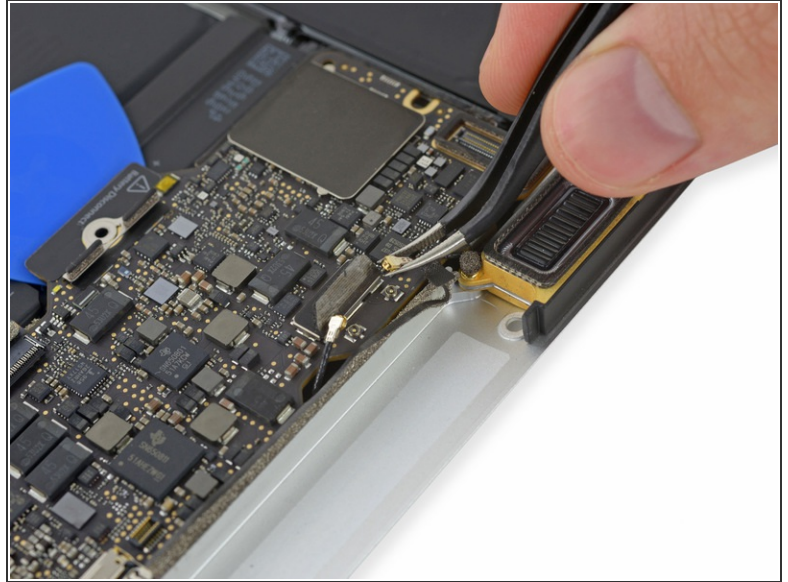
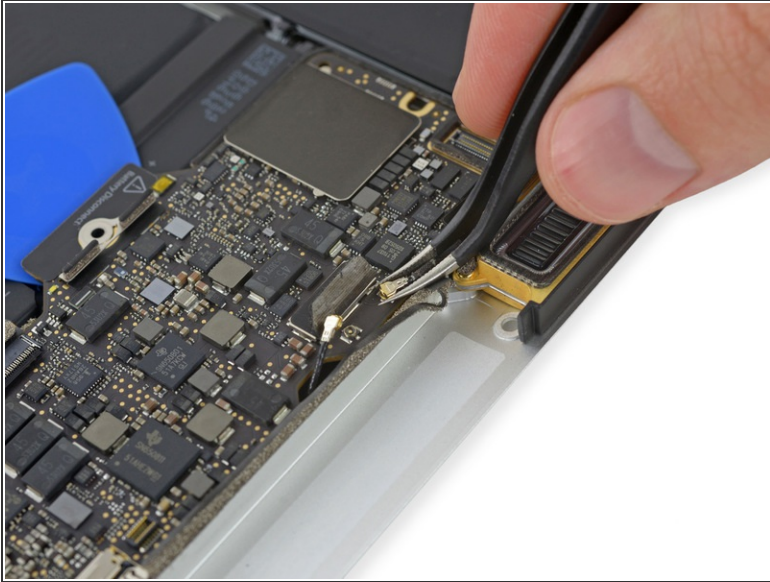
Step 25



- Use tweezers to disconnect the first antenna connector by lifting it straight up from its socket.

⚠ The antenna connectors and sockets are extremely fragile. Be very careful to lift only on the connector, and not on the socket itself. Do not lift under the cable, or put any unnecessary strain on it.

Step 26

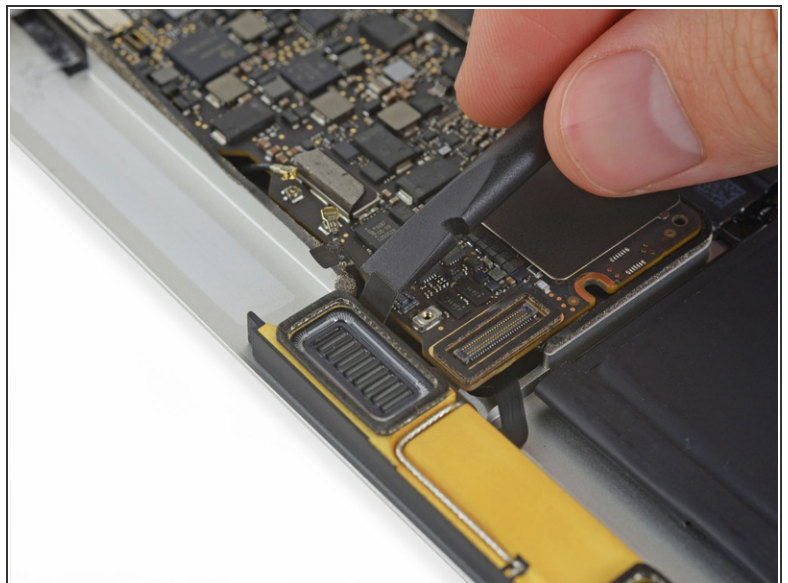
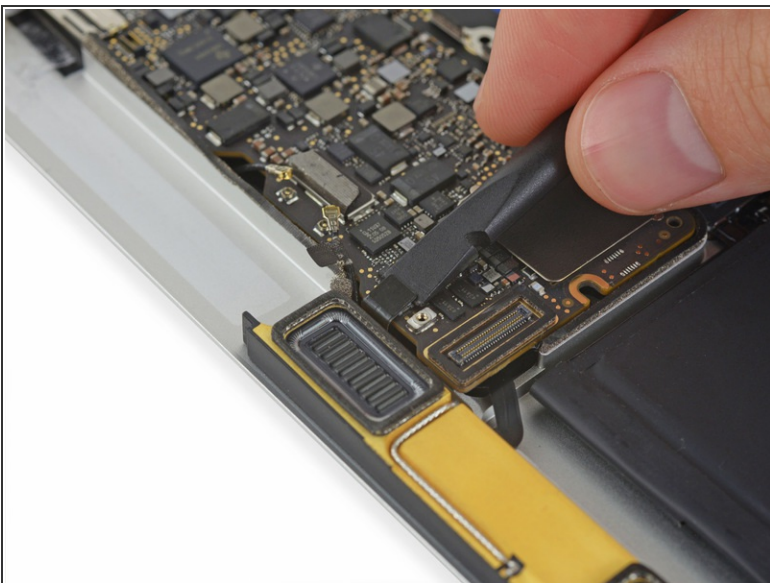


- Use tweezers to disconnect the second antenna connector by lifting it straight up from its socket.



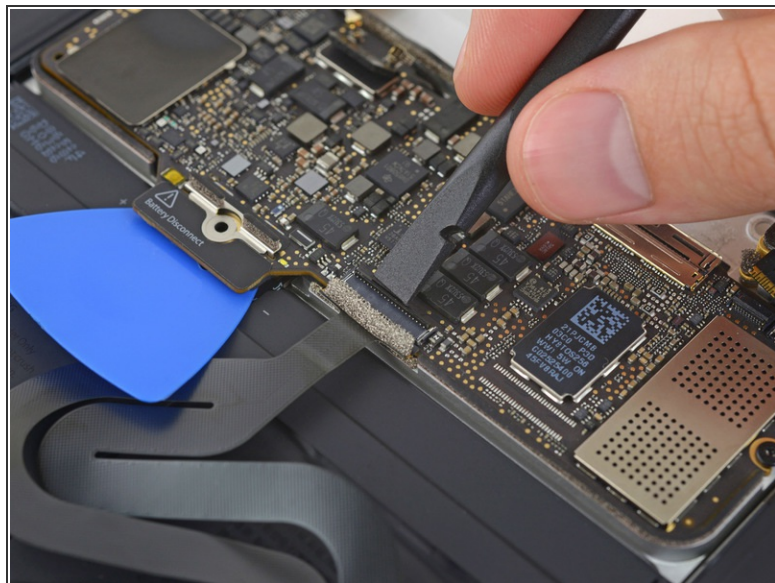
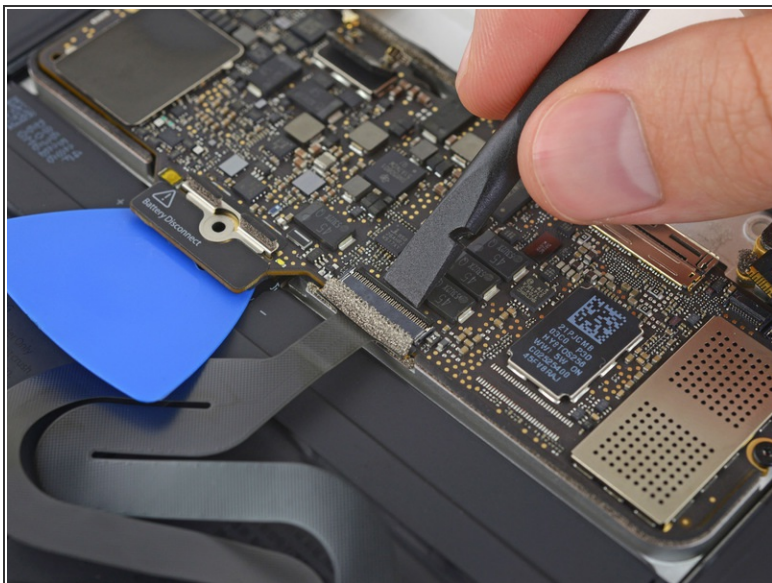
The antenna connectors and sockets are extremely fragile. Be very careful to lift only on the connector, and not on the socket itself. Do not lift under the cable, or put any unnecessary strain on it.

Step 27



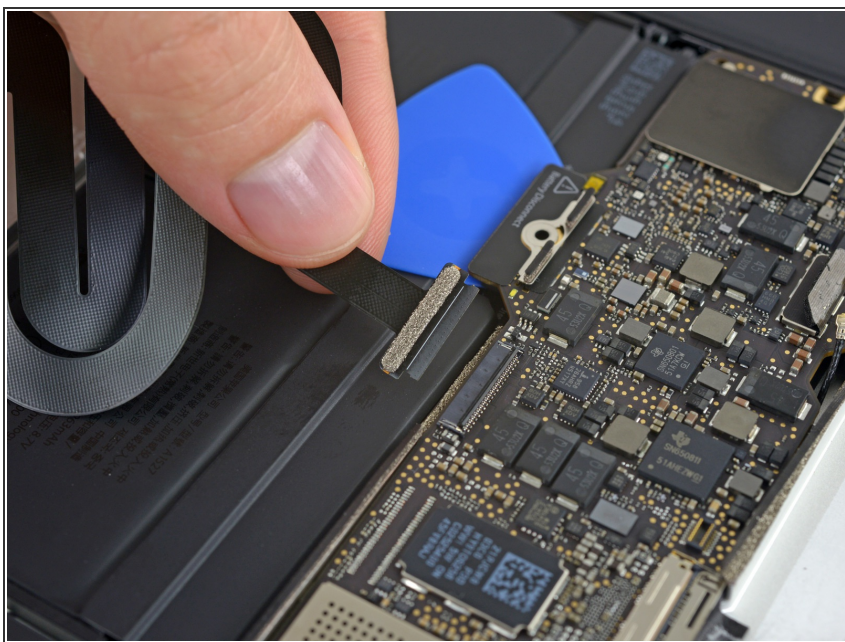
- Use a spudger to disconnect the left speaker cable connector by prying it straight up from the logic board.

Step 28



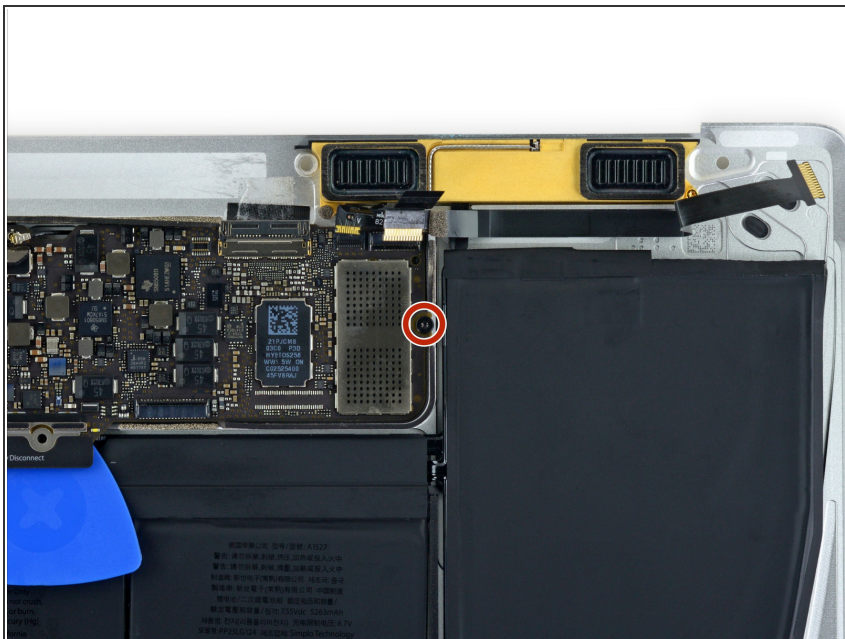
- Use a spudger to flip up the retaining flap on the trackpad cable ZIF connector.

Step 29



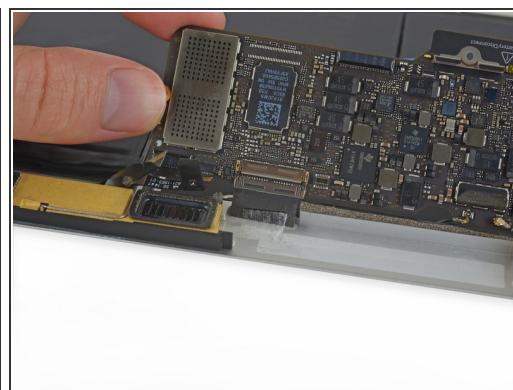
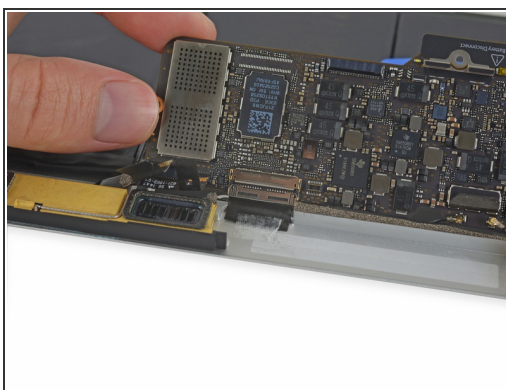
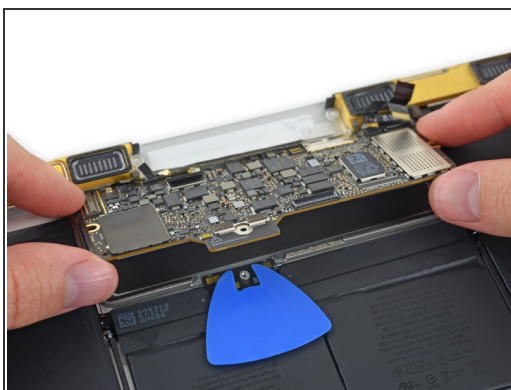
- Disconnect the trackpad cable from the logic board by gently pulling it straight out of its connector.

Step 30



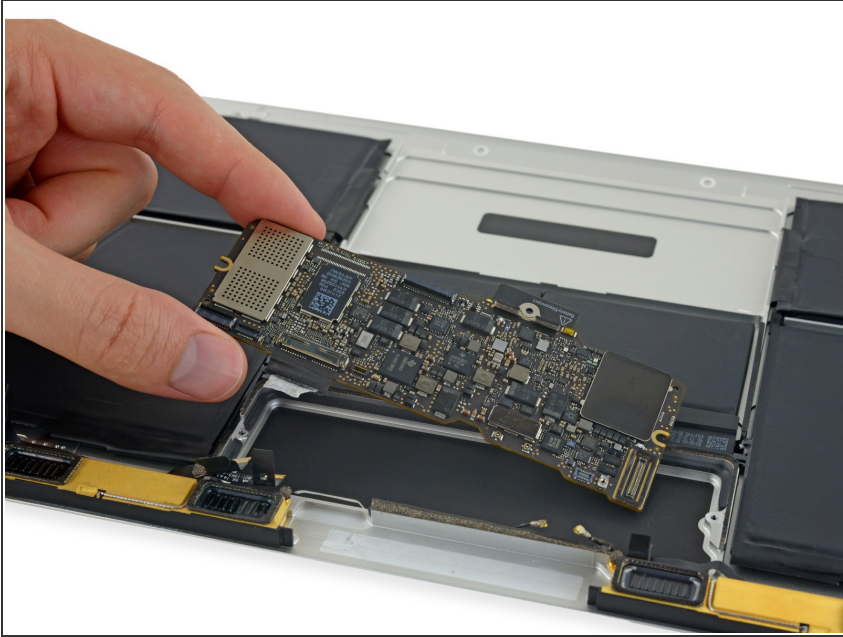
- Remove the single 3.5 mm T5 Torx screw securing the logic board to the lower case.

Step 31



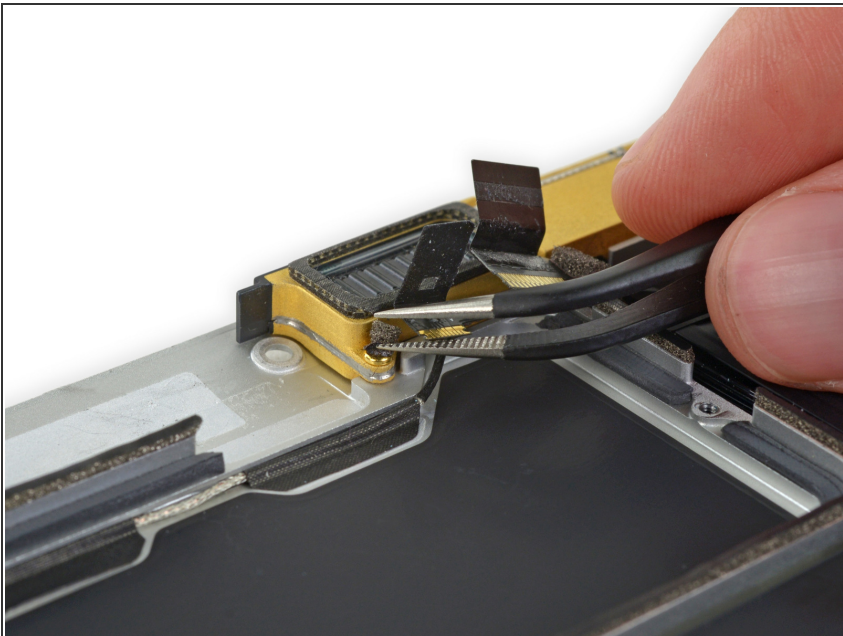
- Flip up the front edge of the logic board.
- Carefully pull up on the rear edge to detach the tape securing the logic board to the lower case.

Step 32



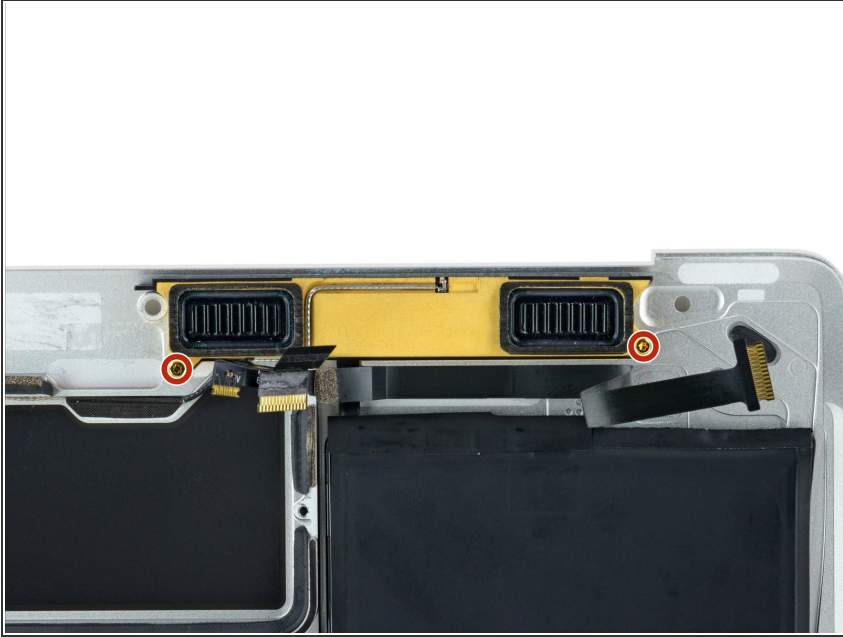
- Remove the logic board.

Step 33 — Right Speaker



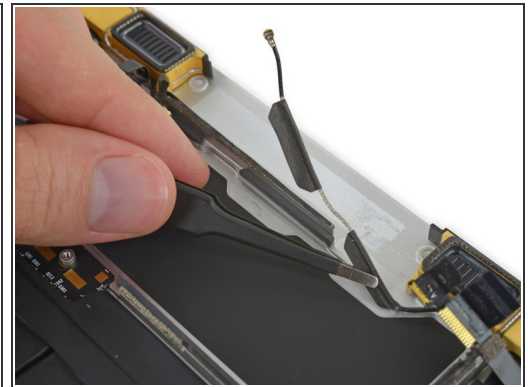
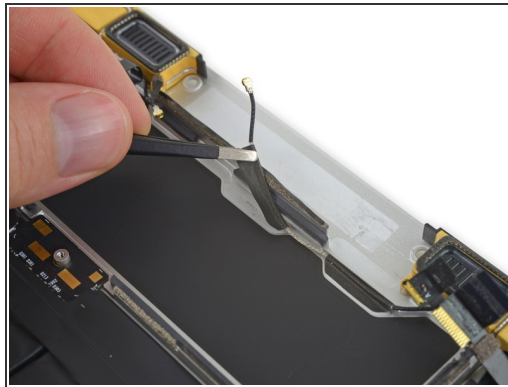
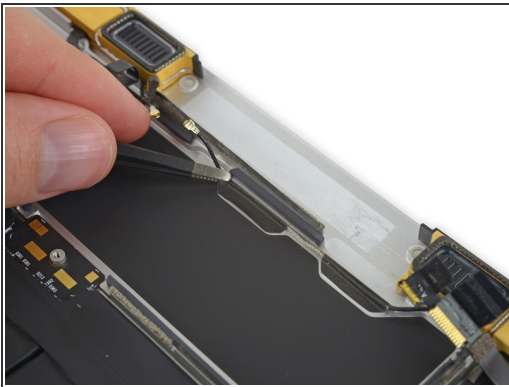
- Using tweezers, remove the foam pad covering the screw on the left side of the right speaker.
- ⚠ If you pull on the foam portion, it will tear. Try to get your tweezers under the adhesive pad holding the foam to the top of the screw.

Step 34



- Remove the two 4.1 mm T4 Torx screws securing the right speaker.

Step 35



- Using tweezers, carefully peel up the tape securing the right antenna cable to the lower case.

Step 36



- [Prepare an iOpener](#) and heat the lower case directly beneath the right speaker for 1-2 minutes, in order to soften up the adhesive securing the speaker.

Step 37



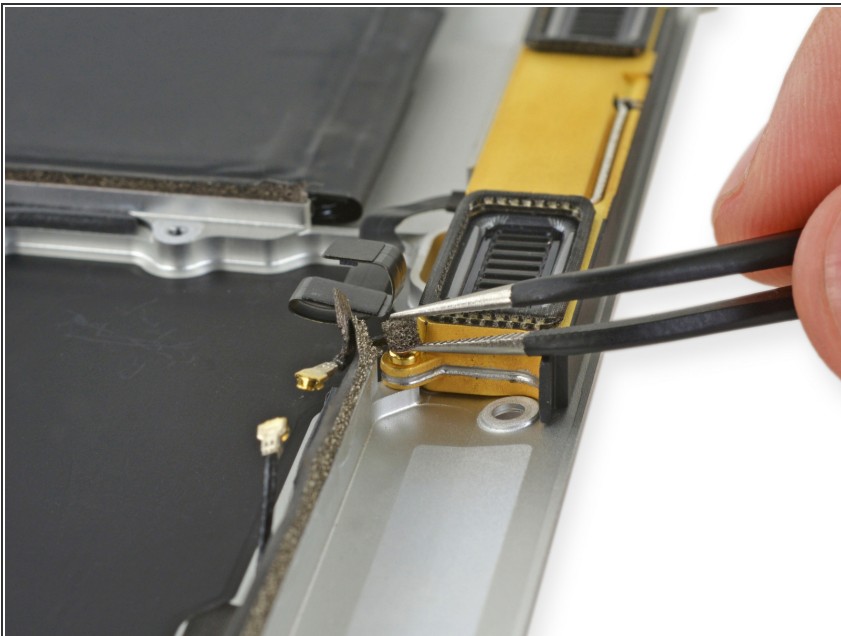
- Use a plastic opening tool to pry under the top edge of the right speaker, and separate it from the lower case.

Step 38



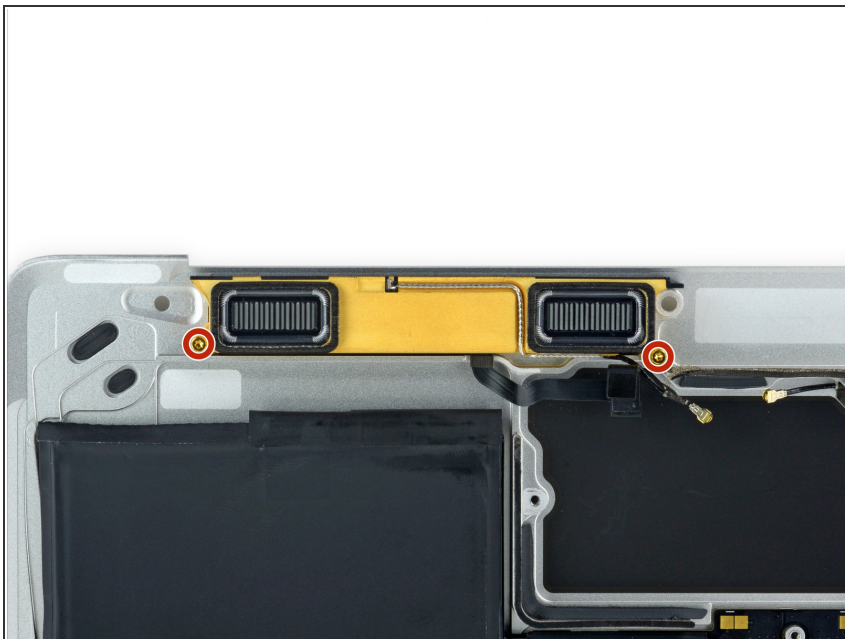
- Remove the right speaker.

Step 39 — Left Speaker



- Using tweezers, remove the foam pad covering the screw on the right side of the left speaker.
- ⚠ If you pull on the foam portion, it will tear. Try to get your tweezers under the adhesive pad holding the foam to the top of the screw.

Step 40



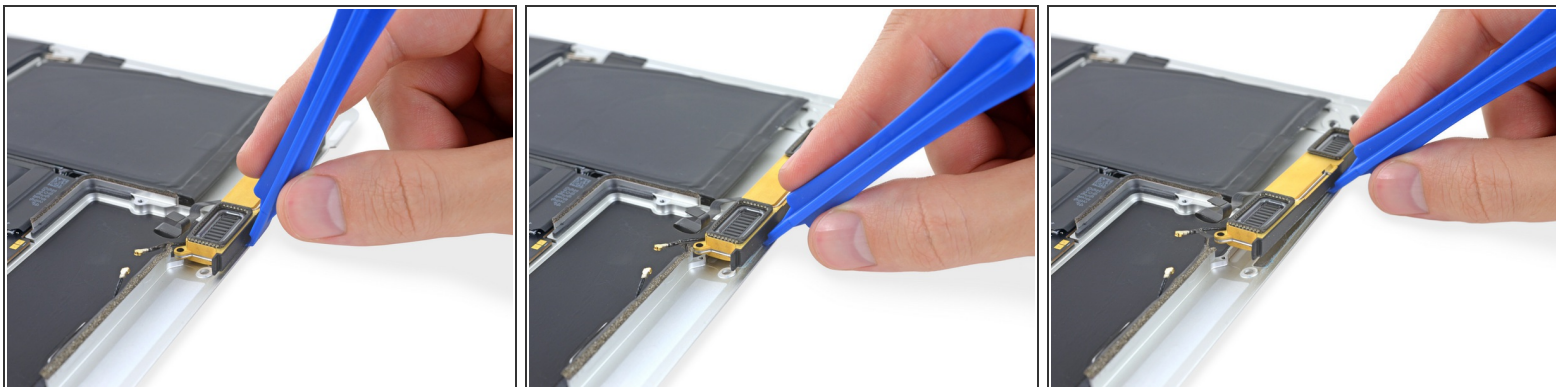
- Remove the two 4.1 mm T4 Torx screws securing the left speaker to the lower case.

Step 41



- [Prepare an iOpener](#) and heat the lower case directly beneath the left speaker, in order to soften up the adhesive securing the speaker.

Step 42



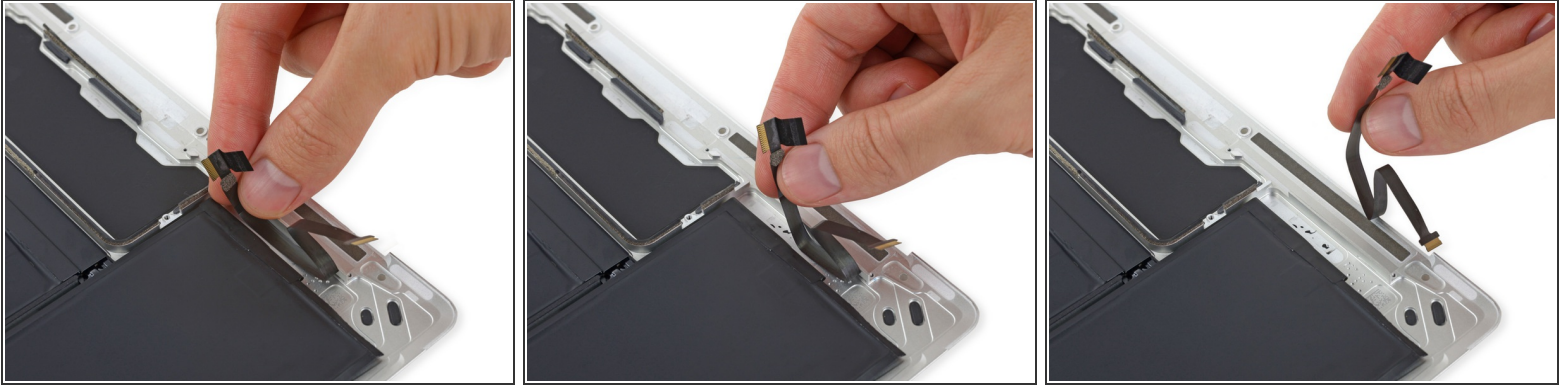
- Use a plastic opening tool to pry under the top edge of the left speaker, and separate it from the lower case.

Step 43



- Remove the left speaker assembly.

Step 44 — Lower Case Assembly



- Carefully peel away the audio board ribbon cable from the adhesive securing it to the lower case.
 - ⚠ Take care not to damage the cable. If the adhesive offers a lot of resistance, first soften the adhesive by heating the lower case directly beneath with an iOpener, and try again.
- Remove the audio board ribbon cable.

Step 45



- Lower case assembly remains.

To reassemble your device, follow these instructions in reverse order.